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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,860	04/09/2004	Alain Lagnier	033818-104	8692

21839 7590 12/07/2005

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EXAMINER	
MAKI, STEVEN D	
ART UNIT	**PAPER NUMBER**
1733	

DATE MAILED: 12/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/820,860	LAGNIER, ALAIN	
	Examiner	Art Unit	
	Steven D. Maki	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-10 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-10 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 040904.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2) **Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 115 (JP 8-175115) in view of at least one of Japan 916 (JP 2002-192916), Shinohara (US 6116310) and Europe 435 (EP 564435).**

As to Japan 916, Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Japan 115 discloses a tire having a tread comprising blocks and sipes in the blocks. The sipes have a width of 0.5-1.5 mm (500-1500 micrometers). Each sipe is made using a blade 15 wherein each wall surface of the blade has a roughness 16 of 20-300 micrometers. The tire has reduced uneven wear. Japan 115 suggests the claimed average roughness (micro-level roughness) of 1-10% sipe thickness (1/100 to 1/10) since Japan 115 suggests a **"micro-level" roughness of 4-20% the sipe thickness** (a roughness of 20 to 300 micrometers and a sipe width of 500-1500 micrometers). Although Japan 115 suggests a "macro-level" configuration in the form of a zigzag (figure 8, paragraph 10 of machine translation), Japan 115 does not recite the sipe as having "lines of motifs in relief" and the corresponding mold blade of "lines of motifs forming hollows".

As to claims 1-10, it would have been obvious to one of ordinary skill in the art to provide Japan 115's mold blade for the sipe with a macro-level roughness with "lines of motifs forming hollows" so that the sipe formed using the blade has "lines of motifs in relief" and such that the "macro-level" roughness is at least 10% sipe thickness (the maximum depth is at least equal to 1/10 of sipe thickness e) in view of the suggestion from at least one of Japan 916, Shinohara and Europe 435 wherein (1) Japan 916, directed to a tire tread with sipes, suggests forming recessed grooves 11a, 11b (figure 5b) in the mold blade such that those grooves have a depth of **25-75% sipe thickness** so that a tire made using the mold blade has reduced sound, (2) Shinohara, directed to a tire tread with sipes, suggests forming grooves in the walls of the sipe such that the grooves have a depth t2 of **10-80% the sipe thickness t1** so that water can be discharged and (3) Europe 435, directed to a tire tread with sipes, suggests forming grooves in walls of a sipe differently from one another such that "groove depth" a $\geq$ "opening width at tread surface" d and "sipe thickness" b $\geq$ 2d (**e.g. use a groove depth of 50% sipe thickness**) so as to allow water to drain off.

As to clams 2-3 and 9, see the "intersecting" figure 1b of Europe 435 or figure 18 of Shinohara.

As to claims 4 and 10, the walls of the sipe of each of the applied references cooperate mechanically.

As to claim 5, note the suggestion from Europe 435 (page 2 of machine translation) and/or Shinohara (figure 10) to use curved / rounded surfaces for the sipe wall.

As to claim 6, note suggestion from Europe 435 (e.g. figure 1b) or Shinohara (figure 5) to incline the grooves on the sipe wall with respect to the radial direction.

As to claim 7, see pitch of the grooves suggested by Europe 435 (figure 1b) or Shinohara (figure 3).

3) **Claims 2-3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 115 in view of at least one of Japan 916, Shinohara and Europe 435 as applied above and further in view of Japan 108 (JP 2-310108).**

As to claims 2-3 and 9, it would have been obvious to use "intersecting" lines of grooves on the sipe wall in view of (1) the suggestion from Shinohara and/or Europe 435 to form grooves in the sipe wall to drain water and (2) Japan 108's suggestion to form grooves for draining water in walls of a sipe such that they "intersect" (figure 7).

Remarks

4) The remaining references are of interest.

5) No claim is allowed.

6) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
December 4, 2005

Steven D. Maki 12-4-05
STEVEN D. MAKI
PRIMARY EXAMINER